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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE



MAP USES IN THE FOREST SERVICE

Maps are among the most essential tools in the administration of the national forests. The 750-odd rangers are responsible for protecting forests and administering the forest-land uses on districts that average 300,000 acres and range in size from 50,000 to more than a million acres. Rangers and forest staff officers use maps for geographic orientation while traveling, and forest maps are also important for record keeping. Maps are required for:

GRAZING SURVEYS to determine forage density and composition; exposure, slope, and soil conditions; location of watering holes, poison plants, stock trails, and other such features. From this information the ranger in cooperation with the permittee develops practical plans for the handling of the livestock and the management of the range.

ROAD LOCATION. No engineer needs to be told why maps are valuable for that.

FIRE DETECTION. Plotting the location of the fire, its rate of spread, and control strategy all revolve about the availability of maps. On large western forests particularly, accurate maps expedite fire control. Most fire control men will agree that in wild country, the better the map, the more prompt and effective the fire suppression action.

DISPATCHING FIRE CONTROL CREWS is done from forest maps on which all detection points, crew stations, roads, and trails are shown. String lines are stretched along azimuth readings reported by the lookouts. Intersections mark the fire. The nearest crew is called and told the 1/4 section in which the fire is burning and its location with respect to creeks and slopes. From the base map, the crew determines what tools and equipment to take by studying proximity of live water, topography. A type map shows whether brush or tree cover predominates.

TIMBER STAND INVENTORY SURVEYS to determine stand, volume, species, rate of growth, quality and merchantability of standing timber are made to guide the ranger in making plans for harvesting his timber crops. As in the case of Grazing Surveys, there must be a map to serve as a basis for keeping track of the data.

TIMBER SALVAGE OPERATIONS, that is, logging after a fire in order to utilize trees killed by the fire before they decay like the harvesting of green timber - requires marking and cutting plans, road and railroad construction. For all of this work, the forest ranger has to have good maps.

It is hard to imagine any activity or use on the national forests where a map is not of prime importance. Not only the forest ranger but the hunter, fisherman, camper, logger, miner, and power plant engineer use these maps.



